

OXIDE SEMICONDUCTOR ELECTRODE AND
PROCESS FOR PRODUCING THE SAME

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ABSTRACT OF THE DISCLOSURE

10 The present invention provides an oxide
semiconductor electrode which can realize a combination
of high transparency with large surface area and is
highly responsive to ultraviolet light, as well as to
visible light. The oxide semiconductor electrode
comprises a conductive substrate and an oxide
15 semiconductor layer provided on the conductive substrate.
The oxide semiconductor layer is a porous layer
comprising porous titania particles which have been
joined to each other to define interparticulate
communicating pores. Preferably, the pores possessed by
20 the titania particles per se have a diameter of 10 to 40
nm, the interparticulate communicating pores have a
diameter of 10 to 70 nm, and the titania particles have
an average diameter of 10 to 70 nm.